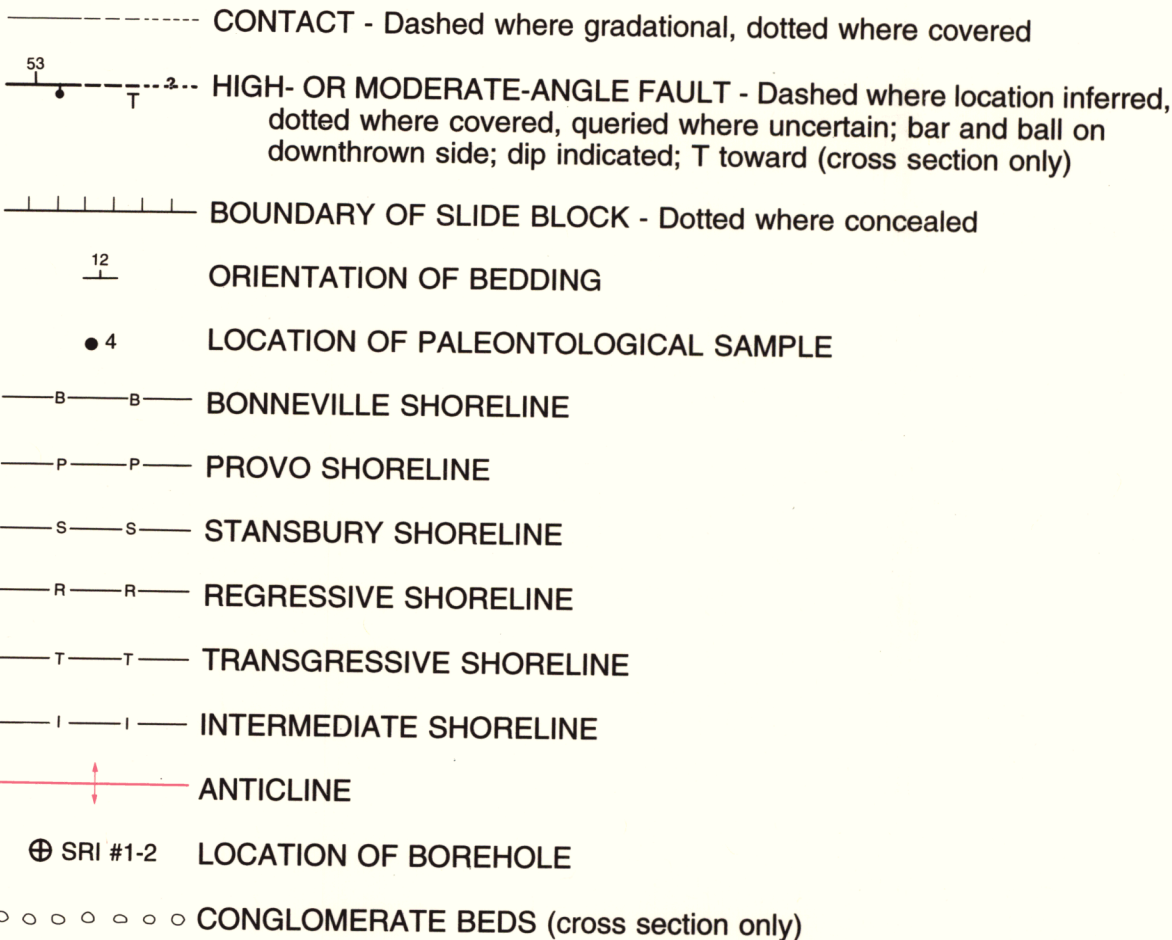




David M. Miller and Joel D. Schneyer
U.S. Geological Survey

1994

MAP SYMBOLS



Qf	Fill--Earthen material used to construct railroad grades and dams.
----	--

Qai	Alluvial silt (Holocene)-- <i>Dark-brown silt and sand formed as ponded deposits behind undissected lacustrine bars of Lake Bonneville, after water withdrawal; overlies similar deposits that formed in lagoons.</i>
Qaf	Alluvial-fan deposits (Holocene)-- <i>Poorly sorted gravel, sand, silt, and clay forming fans and terraces. Youngest of the alluvial-fan deposits.</i>

Omc Mass-movement colluvium (Holocene)--Slope wash forming vegetated moderate-gradient slopes beneath cliffs and talus.

Mass-movement talus (Holocene)--*Blocky debris forming sparsely vegetated steep slopes below cliffs; most common near Lake Bonneville shoreline.*

Poorly sorted alluvial deposits partly reworked by shoreline processes, patches of lacustrine fine sediments, local alluvium covering lacustrine deposits, and marly sand of mixed alluvial and lacustrine origin.

Qms *Quaternary mass* (Holocene and Pleistocene)—Slumped coherent masses of material and coherent slide blocks. Hachures indicate headwall scarp.

Qlg *Gravel and sand (Holocene). Well-sorted gravel and sand. Commonly underlies slopes below beach complexes of lacustrine gravel (Qlg) along west side of North Promontory Mountains.*

Qlg **Gravelly glauconitic sand** (Holocene) Cobble and pebble gravel with silt matrix.
Forms bars and benches.

Q1s **Quaternary sand (Holocene)** Brown, well-sorted sand. Thickest deposits are below Provo shoreline.

Qlm
Limestone marl (paleocene)- white to pale-brown, laminated marl with dropstones. Locally includes sand beds and gravel lenses. Deposited by Lake Bonneville. Lower part of unit shows convolute lamination and roll structures in many exposures.

gravel, sand, and silt forming moderately dissected fans and terraces. Deposits cut by shorelines of Lake Bonneville.

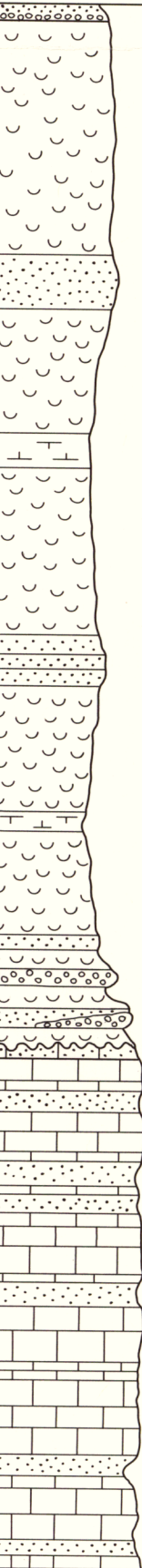
to caliche-cemented, poorly sorted deposits of boulders, cobbles, and pebbles forming highly dissected fans and terraces.

loess and alluvium. Loess in locally thick accumulations; fine sand and silt sized; thin to thick bedded; source unknown. Alluvium is well bedded; clasts are rounded to subangular quartzite, limestone, shale, and siltstone.

Section 7. Air-fall tuff (tuffaceous)--moderately consolidated, gray to brown air-fall tuff and tuffaceous rock redeposited in fluvial and lacustrine environments, and conglomerate and sandstone. Air-fall tuff is mainly glass shards, locally with feldspar and pumice. Redeposited tuff, generally sand and silt sized, contains varying amounts of lithic fragments, and is size sorted and bedded; interbedded with sand, silt, and marl containing little tuff. Conglomerate and coarse sand beds typically at base of section near underlying Paleozoic bedrock.

Bioturbated limestone member (Lower Permian and Upper Pennsylvanian)--Light-medium-gray, silty and sandy clastic limestone and brown, calcareous very fine-grained quartz sandstone. *Bioturbated beds and laminated beds are interbedded on medium scale.*

medium-gray clastic limestone and minor brown quartz sandstone. Thick to medium bedded, fossiliferous, and locally cherty.

FORMATION	MEMBER	SYMBOL	THICKNESS feet (meters)	LITHOLOGY
Eolian loess and alluvial gravel		Tel	100 (30)	
Sedimentary rocks and tuff		Tt	7900 (2400)	
	Bioturbated limestone member	PIPop	100 (30)	
Oquirrh Formation	Limestone member	IPol	3940 (1200)	

